

## CLAIMS

I claim:

- 1           1.     A printing unit cylinder for a rotary printing machine, comprising a body  
2           made of a metallic material having a linear coefficient of expansion of about  $\alpha$   
3      $< 5 \times 10^{-6} \text{ K}^{-1}$  in a temperature range of from about  $20^\circ$  to about  $60^\circ$ .
- 1           2.     A printing unit cylinder for a rotary printing machine according to claim  
2     1, wherein said metallic material has a linear coefficient of expansion of about  $\alpha < 1.5 \times 10^{-6}$   
3      $\text{K}^{-1}$  in a temperature range of from about  $20^\circ$  to about  $60^\circ$ .
- 1           3.     The printing unit cylinder as claimed in claim 1, wherein said metallic  
2     material is an iron alloy having about 30% to about 40% nickel by weight.
- 1           4.     The printing unit cylinder as claimed in claim 3, wherein said metallic  
2     material is an iron alloy having about 36% nickel by weight.
- 1           5.     The printing unit cylinder according to claim 1, wherein the entire  
2     cylinder is made of said metallic material.
- 1           6.     The printing unit cylinder according to claim 2, wherein the entire  
2     cylinder is made of said iron alloy.
- 1           7.     The printing unit cylinder according to claim 3, wherein the entire  
2     cylinder is made of said iron alloy.

1                   8.     The printing unit cylinder according to claim 4, wherein the entire  
2 cylinder is made of said iron alloy.

1                   9.     The printing unit cylinder according to claim 1, wherein the body is  
2 made of a barrel as a central piece and two journals on either side of the barrel and only the  
3 barrel of said cylinder is made of said metallic material.

1                   10.    The printing unit cylinder according to claim 2, wherein the body is  
2 made of a barrel as a central piece and two journals on either side of the barrel and only the  
3 barrel of said cylinder is made of said metallic material.

1                   11.    The printing unit cylinder according to claim 3, wherein the body is  
2 made of a barrel as a central piece and two journals on either side of the barrel and only the  
3 barrel of said cylinder is made of said metallic material.

1                   12.    The printing unit cylinder according to claim 4, wherein the body is  
2 made of a barrel as a central piece and two journals on either side of the barrel and only the  
3 barrel of said cylinder is made of said metallic material.